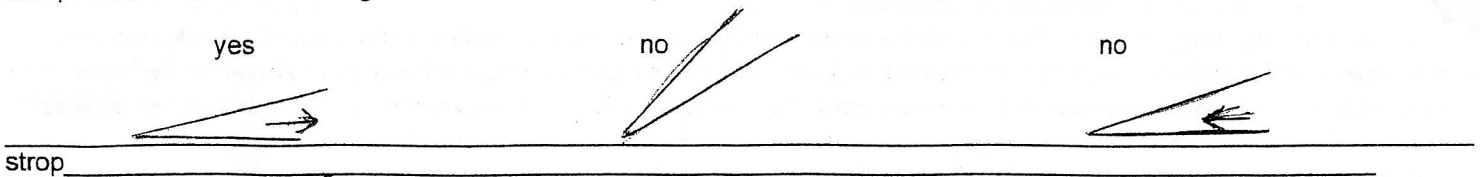


(Nothing Damages + dulls tools faster than sharp edges bumping each other - Never allow tool edges touch.)

GENERAL SHARPENING INSTRUCTIONS by Del Stubbs, Pinewood Forge

STROPPING:

Stropping is the most important form of sharpening. However, careless stropping can easily round and ruin a tool's edge. The secret is careful stropping with good materials. A standard woodcarver's leather strop with good compound and good technique is all that is needed to keep most tools working well most of the time. (we don't recommend jewelers rouge - it's made for polishing soft metals). We have chosen to sell a stropping compound called White Gold because it works quickly and has a good consistency for applying to a strop, but there are many good carver's stropping compounds available, learning how to use well what you have is the main idea.



HOW TO STROP: (approx. every 1/2 hour)

When stropping, lay the tool flat on the leather, polishing the whole surface with solid pressure. The tool's edge will compress slightly into the softness of the leather - this will form the necessary microscopic bevel at the edge. Press firmly - using a few strokes in both directions should be enough to bring a slightly dull tool back to razor sharpness. For some people it helps to push firmly down on the tool with a finger as it is being stropped. Many knives are slightly flexible - this means that you must raise the handle slightly toward the end of the stroke to apply pressure to the tip. If this isn't done to straight edge knives - they tend to get narrower in the middle - forming a convex shape.

Is your brand of stropping compound working well?

Try this: After applying a fresh coat of compound, the very first stroke of the tool should leave black streaks on the strop, and mirror polish on the tool. If it leaves only a dull grey color on the strop, the compound is too soft (not removing enough metal). If the tool is left dull or scratchy looking, it is too coarse a compound.

If stropping isn't working well for you, here are possible reasons:

- The tool needs honing (see next section).
- Your compound is too slow cutting.
- You are not able to press hard enough. In this case, raise the back edge of the tool very slightly off of the strop - this will put all of the pressure on the edge.
- If careful stropping rounds over the edge, then likely the strop is of too rough or too soft a material, or you're raising the back too much - go to a harder or finer leather, hard cardboard (like a cereal box), or to smooth basswood as a strop. You should be able to press quite hard while stropping, without rounding the edge. It's better to take a few strong and careful strokes than a lot of light careless ones.

Power Stropping?

There are various power strops on the market - just be sure they go slow, otherwise you are likely to burn the edge - power stropping produces a surprising amount of heat right at the edge.

HONING:

The tools I produce are such that they rarely need honing! But when to hone? Hone when stropping no longer easily brings the tool back to razor sharpness, or when there is a nick to remove. If your hoe cuts too slowly, you may raise the tool only slightly off the back if necessary (not more than half the thickness of the tool). This will help keep the edge thin. Stop honing either side when a very tiny burr is raised on the entire edge. Feel this burr by stropping the tool lightly backwards against a finger. Remove this burr, with a super fine hone, or with your strop, but use the strop for the finished edge.

Which Hone?

Fine diamond, ceramic, fine india, arkansas, can all work well. Do not use a coarse carborundum bench stone, unless the edge is damaged badly. Don't use a high speed grinder, they are too aggressive and hot. If your tool is badly damaged and needs lots of metal removal, a coarse diamond hone or water cooled slow speed flat grinder is all I would recommend. We have chosen to offer our customers a selection of fine diamond hones. These are not the horrible and overpriced coarse hones with holes - we found a set of superfine professional grade hones specifically for fine sharpening these kinds of tools. Especially the 1200 grit - it cuts fast yet so fine you may go direct to the strop afterwards. Many carvers have trouble with honing because they use too coarse or too slow cutting types of hones. Consider the "Sharpening Simplified" video we offer, its camera work is not Hollywood, but the author really knows sharpening and presents it well.

IS IT SHARP?

There is only one test that I know of that can actually tell that a tool is sharp (shaving hair means little - a tool that is full of nicks can still shave hair). I learned this test from a Japanese furniture maker. Take a piece of clear white cedar if you can find it. (basswood can work but is more difficult to read). Cut or split it to a piece about 1/4" x 1", like a thick paint stick, and take a long slicing sloped and angled cut across the end grain. Look very closely at this surface, use magnification. If it is very shiny, clear and dark, you have a perfect edge (all knives I make pass this test before I sell them). Even the tiniest microscopic ding or nick functions like a little bulldozer - It will leave a tiny whitish streak of crushed fibers across the cut surface. If the entire cut surface is crumpled, dull or broken looking, than the entire edge is dull and acts even more like a bulldozer. See if a few strokes of stropping will fix this, if not - then start with a fine hone.

HARLEY AND STUBBY - BASSWOOD CARVING KNIVES:

Follow sharpening instructions above. Because of the width of the blade and the high quality of the steel, I am able to shape these blades especially thin (12 °), resulting in knives that cut wood very easily. However, twelve degrees is too thin for the final cutting edge, so I add, microscopically, a tiny heavier bevel. In sharpening, the goal is to keep this microscopic bevel as small as possible, and yet maintain the thinness of the blade. Because of the thin blade they should not be used to pry or lever wood. If you hone this tool and then notice the edge is not holding up - it means you have not given it enough micro-bevel, immediately after honing one may lift the back of the tool even 45 degrees and give one or two careful stropps to re-establish the microbevel, then go back to flat stropping for the next year!

HOOK KNIVES: Stropping a hook knife I polish the entire inside of the blade, thus I recommend never honing it - that would only scratch the polish. Instead, to remove the burr created when the outside bevel is honed - take a 1/2" dowel, rub a good sharpening compound on it, and laying it perpendicular to the steel, stroke away from the cutting edge on the inside. If you are carving a particularly hard or abrasive wood - a way to toughen the edge is to create a micro bevel on the inside. Hold the dowel at an angle to the edge, 30 degrees is good, and stroke once or twice going away from the edge. Don't overdo it! To strop the outside - stroke backwards on your strop - stropping the outside of the tool in a sweeping motion as you raise the handle, when the handle is vertical - simply rotate it a 180 degrees and strop down to the tip of the tool. After many sessions of carving/stropping, carving/ stropping, the edge may become slightly rounded (more from using leather than from using wood stropps) - now is the time to hone. Honing a hook knife: Rub the outside of the hook knife with a dark colored magic marker - this will teach you exactly what you are doing with the hone (or strop). With the hooks tip resting on your bench, take a fine or extra fine (600 or 1200 grit) diamond hone and gently sweep it along the edge, trying to stay back from the actual edge a 1/16" or so. the markers ink will help you do this. Keep stroking in this plane until the honing strip reaches the edge. Stop when you can feel a slight burr forming on the inside. Once you have learned to do this it will be easier to take the same process to the end curve of the knife. After honing, always do the outside and inside stropping, and the tool should be like new. Test it in by cutting - the surface should be perfectly shiny without and lines.

SLOYD KNIVES: To strop: - take the compound, rub it on a piece of fine grained wood like basswood or on your leather strop, and stroke backwards - stropping the bevel of the tool in a sweeping motion. Put most of the pressure on the back of the bevel as you are learning, slowly adding more pressure to the edge as you learn. Use a magic marker as mentioned in hook knives to see just where the strop is hitting. To Hone: After many sessions of carving/stropping, the edge may become slightly rounded (slightly more from using leather than from using wood stropps) - this is when it's time to use a fine hone on the bevel to re-flatten the edge. I find for many people there is better control if the stone is on the bench and your whole body makes a sweeping motion with the tool, rather than taking the stone to the tool. This is true for stropping as well. Hone one side till you can feel a slight burr along the entire opposite edge, then hone the other side. If new at this use a magic marker, very good light, and close-up glasses. After honing, always strop, till the tool cuts like new (leaves a shiny flawless surface)

KOLROSING KNIVES: These are made of M2 high speed steel so they rarely need even stropping. You may use a leather strop, but I prefer to just rub compound on a piece of basswood and use that for a strop. These tools are unusual: they need a fairly blunt angle because the cut must be shallow to allow the tool to make very tight turns. If you find the cut is still too deep, then use a fine hone to thicken the bevel a bit.

DETAIL KNIVES: Strop these on leather or wood, you may fine re-shape the little back angle on the back side of the tip with a fine hone to suit your type of work.

For a current catalog of all the carving knives I make:

www.pinewoodforge.com phone: 1-800-423-1844

Pinewood Forge 17738 Nelson Dam RD NW Leonard, MN 56652

GOOD LUCK! - LET ME KNOW IF YOU HAVE ANY SHARPENING DIFFICULTIES ~ Any input is appreciated.

Sincerely, Del Stubbs-Knifemaker (This information may be copied, but for non-profit use only). Thanks!

Tools are extremely sharp. Carving Gloves are recommended.